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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,461	01/09/2004	Justin Goshgarian	PA1776 US (1737.2770000)	6424
28390 7590 12/20/2007 MEDTRONIC VASCULAR, INC. IP LEGAL DEPARTMENT 3576 UNOCAL PLACE SANTA ROSA, CA 95403			EXAMINER NEAL, TIMOTHY J	
			ART UNIT 3731	PAPER NUMBER
			NOTIFICATION DATE 12/20/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rs.vasciplegal@medtronic.com

ED

**Office Action Summary**

Application No.

10/753,461

Applicant(s)

GOSHGARIAN, JUSTIN

Examiner

Timothy J. Neal

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,7-13,15,18-25,27 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-13,15,18-25,27 and 29-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This action is in response to the amendments filed on 08/14/2007 and the Request for Continued Examination filed on 09/07/2007.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 4, 7-13, 15, 18-25, 27, and 29-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottone et al. (US 2004/0093058) in view of Ischinger (US 6,146,417).

Cottone discloses a stent with a tubular body, a flaring member, a short segment of the flaring member remaining parallel to a longitudinal axis of said tubular body in the expanded configuration, and a long segment being generally perpendicular to the body upon expansion (Figure 4B). Cottone also discloses a balloon catheter (530), a retaining structure (520), and is of module construction (Figure 4B). Cottone's flared portion is made of nitinol (paragraph 22). Cottone does not disclose the body being a cobalt-chrome alloy (specifically MP35N) and a weld used to join the flared portion and the body portion. Cobalt-chrome alloys are well known in the art (Lau et al. (US 5,873,906). The use of a known material in a known manner to yield predictable results

is considered obvious. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cottone's body to include a cobalt-chrome alloy. Ischinger teaches welding as a means to connect to different materials into one stent (Column 2 Lines 21-37). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cottone's stent to include Ischinger's welds. Such a modification allows for different materials to be connected giving stents a wider range of capabilities.

Cottone also does not explicitly disclose the lengths associated with the flaring member. However, the Examiner considers it to be within the purview of a person having ordinary skill in the art to adjust Cottone's flared portion to any desired length. Furthermore, Figure 4B shows the general relation between the short segment and the long segment of the flaring member. In this drawing, the relative lengths between the two segments are substantially equivalent to the claimed lengths. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Cottone's segments to the claim's lengths. Such a modification would provide desirable length characteristics for a variety of differently sized lumens. Furthermore, there is a need for the long, perpendicular segments to be significantly longer than the short segments so that the device will be able to maintain its location. If the segments are too short, the segments will not maintain their proper expanded position, and the device will be susceptible to movement.

**Claims 1, 2, 4, 7-13, 15, 18-25, 27, and 29-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Vardi et al. (US 2002/0156516) in view of Cottone et al. (US 2004/0093058) and Ischinger (US 6,146,417).

Cottone and Ischinger disclose the invention substantially as claimed as stated above. However, because the Applicant has argued that Cottone's body and flared sections would not be connected with a weld, the Examiner is included Vardi as an example of well-known ostium stent. Vardi discloses a stent with a flared portion attached directly to its body (Figure 6g). Vardi does not disclose the specific materials or means for attachment. Therefore, it would have been obvious to a person having ordinary skill in the art to modify Vardi's stent include Cottone's general shape and Ischinger's welds. Such a modification would allow for different materials to combine into one stent making the stent more adaptable to different situations. Also, the Examiner notes the use of a retaining structure to be taught by Cottone (Item 520), the claimed materials are considered well known, and the lengths of the flared portions are obvious. This rejection is specifically being made to show that flared portions are often attached directly to body portions. Cottone is not being used as the primary reference to avoid arguments that welds teach away from Cottone or would destroy Cottone. As stated above and below in the response to arguments, the Examiner does not consider welds to destroy the reference, but this rejection is an attempt to circumvent such reasoning.

***Response to Arguments***

Applicant's arguments filed 08/14/2007 have been fully considered but they are not persuasive.

The Applicant has argued that Cottone does not disclose a stent with a flared section of nitinol and a body section of a cobalt-chrome alloy. Also, the Applicant contends that Cottone does not disclose welds for connecting these two portions. The Examiner considers it obvious to modify Cottone to include these limitations. Although Cottone discloses using a membrane that allows cellular in-growth, the reference does not preclude the use of welds in addition to the membrane. The body section and the flared section may still have a membrane while being connected by welds. The welds will increase the strength of the connection and still allow the membrane to encourage cell growth.

In general, the Examiner considers the claims to have three main elements. Firstly, nitinol and cobalt-chrome alloys are widely used in stent manufacturing, and it is known to make a multi-material stent. The use of known elements in a known manner to yield predictable results is considered obvious to a person having ordinary skill. As to the second contention, welds have been shown above and in the previously cited pertinent art to be well known. Again, welding two alloys together is not patentable over the prior art. The Applicant has clearly claimed "welds" to overcome any confusion as to whether the claims constituted product-by-process limitations, but these structural limitations are still considered obvious. A person having ordinary skill in the art would know to combine two different alloys via welding. Finally, stents with flared ends are

known in the art to help keep the stent in place in a branch vessel. All of the claimed features are known. The combination of these features follows a logical progression because each individual feature offers at least some advantage, the combination of features does not involve novel enterprise, and the combination does not eliminate the advantages of the individual features. For at least these reasons, the claimed invention does not overcome the prior art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lau et al. (US 5,873,906 discloses that cobalt chrome alloys are old and well known in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Neal whose telephone number is (571) 272-0625. The examiner can normally be reached on M-F 9:00-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJN



Todd E. Manahan  
SPE 3731